

REMARKS

By this amendment, claims 1, 8, and 10-16 are pending in this application. Each independent claim has been amended and the pending rejection under 35 USC 102(e) over US 6,050,990 (Tankovich) is now moot. For the following reasons, all claims are now in condition for allowance.

Claim 1 has been amended to recite that the hair structure is expose to the source of electromagnetic radiation in the absence of any topical compositions, chromophores, etc. As well, this claim now recites that the exposure is carried out in a manner that does not cause skin ablation, i.e., thermal injury. These features of the invention are described in the original specification on page 1, lines 8-10, and in the various examples. Tankovich does not teach or disclose such a process for hair growth stimulation.

For example, at col. 8, lines 55-59, Tankovich teaches a process for hair growth stimulation in which “[t]he degree of irritation or mild injury administered is that sufficient to trigger the natural self-protective repair mechanism”. The mechanism for hair growth stimulation described by Tankovich is to cause thermal injury to the hair growth structure to trigger the natural healing process which increases blood flow to the hair follicles. In contrast the present invention is directed toward non-thermal for hair growth stimulation, i.e., means which do not cause thermal injury (ablation) to the skin. }

Further, Tankovich teaches the use of topical compositions, or contaminants, in combination with lasers to further improve the efficacy of treatment. As stated in the present specification, embodiments of applicant’s claimed invention do not require such contaminants.

For these reasons, the rejection of claims 1 and 8 is overcome by this amendment.

Claims 10 and 16 have been amended to recite that the source of electromagnetic radiation used in conjunction with the topical chromophore (or other composition) is a non-coherent light source. Tankovich only teaches the use of lasers. Since Tankovich’s invention

requires some degree of thermal injury to the skin, lasers are disclosed specifically for their ability to produce coherent radiation, which helps avoid excess thermal injury and enables a very narrow beam focus. As shown in applicant's specification, a narrow beam focus is not required for efficient treatment. Further, without the need to cause thermal injury, applicant's invention may employ low-intensity, non-coherent, i.e., multichromatic, light sources. For these reasons, claims 10-16 overcome the rejection.

All claims are now in condition for allowance and a notice thereof is solicited.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "**Version with markings to show changes made**".

In the event that the transmittal letter is separated from this document and the Patent and Trademark Office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no. 509582000221. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Respectfully submitted,

Dated: May 19, 2003

By: 

Wayne C. Jaeschke, Jr.
Registration No. 38,503

Morrison & Foerster LLP
1650 Tysons Blvd., Suite 300
McLean, Virginia 22102
Telephone: (703) 760-7756
Facsimile: (703) 760-7777

VERSION WITH MARKINGS SHOWING CHANGES MADE

In the Specification:

Please amend the following paragraphs as shown.

At page 5, line 17:

[Figure 1] Figures 1a and 1b [is a] are schematical [illustration] illustrations of various treatment regimens, including the low level light method of the present invention which may also incorporate the use of topical formulations.

At page 5, line 21:

[Figure 2 is] Figures 2a and 2^b ~~combine to form~~ a schematical representation of treatment regimens pertaining to the use of low level light according to the present invention.

In the Claims:

Please cancel claims 2-7 and 9 without prejudice or disclaimer.

Please amend the claims, as follows.

1. (Amended) A method for stimulating hair growth, comprising:

exposing a hair growth structure to a source of electromagnetic radiation having a dominant emissive wavelength of from about 390 nm to about 1600 nm, without having applied a drug, cosmeceutical, and/or chromophore to the hair growth structure;

photostimulating [said] the hair growth structure by maintaining the exposure of [said] the hair growth structure to [said] the source of electromagnetic radiation for a clinically effective duration and at a clinically effective [light] electromagnetic radiation intensity to stimulate hair growth without causing skin ablation.

10. (Amended) A hair growth stimulation apparatus system comprising:

means for photomodulating a hair growth structure using a source of multichromatic electromagnetic radiation, the source of multichromatic electromagnetic radiating having a dominant emissive wavelength between about 300 nm and about 1600 nm; and a photomodulation enhancing agent.

11. (Amended) The system of claim 10 wherein said means for photomodulating said hair growth structure comprises a [light] electromagnetic radiation source selected from the group consisting of an ultrasound radiation emitter, a light emitting diode, [a laser,] a laser diode, [a dye laser,] a metal halide lamp, a flashlamp, a halogen lamp, metal-sulfide lamps, a mechanically filtered fluorescent light source, a mechanically filtered incandescent or filamentous light source, and combinations thereof.

16. (Amended) A system for stimulating hair growth comprising:

at least one source of multichromatic electromagnetic radiation capable of emitting light having a dominant emissive wavelength of from about 390 nm to about 1600 nm; and

a composition selected from the group consisting of retinoids, retinol, minoxidil, caffeine, phytoestrogens, nitric oxide generating agents, oxygen generating agents, polymixin, procyanidin B2, procyanidin C1, and derivatives, subcomponents, and analogs of the above, both natural and synthetic, and mixtures thereof.